REMARKS

Note – All of the rejections are to claims 1-11. Since claim 11 was canceled in the response to the previous office action, Applicant assumes that these are rejections of claim 1-10.

Claims 1-10 have been rejected on the grounds of nonstatutory obviousness-type double patenting over claims 1-33 of copending application No. 11/438,618. As stated in the response to the previous office action, Applicant believed he had included a terminal disclaimer therewith. Nevertheless to overcome this rejection included herewith is a terminal disclaimer over the cited application.

Claims 1-10 have been rejected under 35 U.S.C. 102(b) as anticipated by WO01/34702A2. Applicant traverses for the following reasons.

In reply to Applicant's previous response the Examiner made several comments. One of these was that the Applicant did not provide the evidence relating to the lab tests. Attached to the Declaration should have been the laboratory notebook pages mentioned in section 8 of the Declaration. The Declaration is hereby resubmitted with these pages attached. If the Examiner requires further experimental details he is requested to provide a more detailed explanation of what is needed.

The Examiner also stated that certain attributes of the thermally conductive fillers, which Applicant relied upon in their arguments, such as amount, thermal conductivity and form of the filler are not in the claims, and therefore can't be relied upon to distinguish the claims from the cited references. Applicant, in the previous response, did not mention these factors to differentiate between the references and the present claims, but to explain why the minimum amount of thermally conductive filler needed would vary from filler to filler. That is, for instance, the minimum amount of carbon (graphite) powder needed to achieve the needed thermal conductivity may be (and is) much more than 5%, while another thermally conductive filler with higher thermal conductivity and/or a different form may be required in a much lesser amount to achieve the needed thermal conductivity of the composition. This was therefore in the response to explain why carbon powder, as used for instance in WO01/34702 is needed in much higher amounts than used in that reference, despite the general statement in the present application that useful concentrations of the thermally conductive filler ranged from 5% to 65%. Thus WO01/34702 the compositions do not necessarily inherently provide the needed thermal conductivity.

Insofar as the Examiner's comment concerning the upper 10% limit in WO01/34702 the very low thermal conductivity of 0.368 W/m°K obtained with 8% carbon fiber would clearly indicate to anyone of average skill in the art that much larger amounts of carbon fiber would be needed to bring the thermal conductivity up to the claimed level of 1.0 W/m°K. This is confirmed by the high levels of carbon black needed in the Examples to raise the thermal conductivities to the needed level.

As for the type of LCP used, this should have essentially no effect on the results. All unfilled LCPs have through plane thermal conductivities of about 0.2-0.3 W/m°K, and the polymer essentially acts as a "thermally insulating diluent" to the thermally conductive filler. Therefore, again, one skilled in the art would accept the results reported in the Declaration as typical for the amount of carbon fibers used.

The Examiner's attention is drawn to *Union Oil Co. of California v. Atlantic Richfield Co.,* (CAFC 2000) 54 USPQ2d 1222 wherein the second headnote is concerned with anticipation. In that instance the Court explained that even though the composition in dispute was a known racing or aviation fuel, it was not known as a standard automobile fuel, and therefore each and every element of the claimed invention was not known in the prior art and there was no anticipation. Here the minimum thermal conductivity stated by the Applicant is analogous to the "standard automobile fuel" of the cited case, and thus there is no anticipation.

Also the fourth headnote of *Atofina v. Great Lakes Chemical Corp.,* (CAFC 2006) 78 USPQ2d 1417 is also of interest. In this headnote the Court declares that even if part of a temperature range overlaps between a reference and the claim in dispute, the newly claimed range must be disclosed in the reference with "sufficient specificity" to anticipate the claimed range. In the present instance the need for enough thermally conductive filler, including carbon fiber, to be present in the composition is clearly not disclosed, and even if at say 10% carbon fiber the composition had the needed thermal conductivity, it is not disclosed with sufficient specificity to be anticipatory. The situation of the present case is cleanly analogous to that in *Atofina.*

Claims 1-10 continue to be rejected under 35 U.S.C. 102(b) as anticipated by Nakamichi (US 5,028,461).

In his comments about the response to the previous office action the Examiner apparently concludes the Nakamichi's composition can contain up to 63% of

inorganic filler. This can't be correct. If the composition contains 63% inorganic filler and 90% glass filler (which is already over 100% of the composition) how much polyphenylene sulfide (PPS) does it contain? It is believed that the sections of Nakamichi referred to by the Examiner use a different method of calculating ingredient concentrations. They are based on the amount of PPS present in the composition. If this is true, the maximum concentration of inorganic filler possible as described at col. 3, line 67 to col. 4 line 1 is 25% (63 parts of inorganic filler, 90 parts of glass fiber and 100 parts of PPS), and the possible concentration range of inorganic filler is 2-25%. While 25% may be enough to give the required thermal conductivity, 2% certainly is not.

The claims of Nakamichi on the other hand give a somewhat different method of calculating concentrations, and claim 1 makes clear there is a choice of 2 different compositions. One composition contains NO inorganic filler while the other composition of claim 1 contains 15-40% by weight of an inorganic filler (which may be carbon black or carbon fiber or any other filler).

The Examiner also states that the listing of inorganic fillers at col. 3, lines 51-56 is limited to the 14 fillers mentioned. This is clearly not the case, as this passage starts with the words "Example [*sic*] of the inorganic fillers ..." clearly indicating to one of average skill in the art that the inorganic fillers are not limited to those mentioned but could include any inorganic fillers, and presumably especially those commonly used in thermoplastic composition. Furthermore, Nakamichi does not use either of the carbon fillers in his examples, and apparently does not prefer them because claim 4 of Nakamichi which names specific fillers, does not include carbon black or carbon fibers.

Nakamichi certainly doesn't suggest thermal conductivity is important to ovenware, and while some of his *possible* compositions could have the now desired thermal conductivity, there is no guidance to either choose such compositions that inherently have this property, or suggests or prefers compositions having this specific property. One way of looking at the situation is that the applicant has selected certain compositions that may be included in Nakamichi's generic description, but that these improved compositions are certainly not obvious from Nakamichi.

In view of the foregoing, allowance of the above-referenced application is respectfully requested.

Respectfully submitted,

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